

**Second Conference in the Continuing Dialogue on Security for Our Nation's Historic
Landscapes, Buildings, and Collections
Wednesday, July 24th and Thursday, July 25th, 2002
Cathedral Hill Hotel, San Francisco, CA**

Blick, David	<p><u>Disaster Recovery Assistance from HUD: Community Development Block Grant, and Home Investment Partnership Grants</u> By David Blick, Historic Preservation Specialist, U.S. Department of Housing and Urban Development</p> <p><u>Summary of Remarks:</u></p> <p>Mr. Blick outlines the Community Development Block Grants (CDBG) appropriated for various purposes in recent years, which include \$85 million to repair the damage caused by 1992 hurricanes Andrew, Iniki and Omar, \$400 million to repair the damage caused by the 1994 Northridge earthquake and a total of \$2.7 billion granted to the state of New York following the terrorist attacks of September 11th, 2001. Of this money, \$700 million was provided to the Empire State Development Corporation, while the Lower Manhattan Development Corporation claimed the remaining \$2.0 billion. All in all, CDBG appropriations have totaled \$4.566 billion.</p> <p>Describing the workings of the CDBG program, Mr. Blick explains that there exist an extremely broad range of activities eligible for CDBG funds, opportunity for citizen input, an emphasis on low-to-moderate income persons, and a great deal of autonomy given to local governments regarding what activities should be implemented. Among the many activities eligible under the CDBG program are acquisition of real property, relocation payments for residents and businesses, demolition and clearance, construction, reconstruction, and rehabilitation of public works, facilities, and housing, economic development, historic property rehabilitation, and non-federal cost sharing for projects meeting CDBG requirements.</p> <p>Specifically, the historic preservation activities are outlined in 24 CFR Part 570.202(b), which states that "CDBG funds may be used for the rehabilitation, preservation, or restoration of historic properties, whether publicly or privately owned... [CDBG] is not authorized for buildings for the general conduct of government."</p> <p>The requirements for the CDBG stipulate that all activity should include citizen participation, and be open for public notice and comment, as well as be designed to meet certain environmental and labor standards, and certain national objectives, such as providing low and moderate income benefit, prevent or eliminate slums or blight, and/or meet an urgent need. "Urgent need" is defined as to necessity to "meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health and welfare of the community where other financial resources are not available to meet such needs."</p> <p>Funds set aside for Section 108 loans must be used in accordance with</p>
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	<p>all of the other requirements that apply to CDBG funds received directly from HUD. Section 108 loan grantees can finance up to five times their annual grant output, but must meet a 70 percent overall low/mod benefit requirement.</p> <p>In conclusion, those interested in more details are directed to contact their local HUD office, or the HUD headquarters program contact, Jan C. Oppen, phone number 202-708-3587, or through her email at jan_c. opper@hud.gov.</p>
Caspe, Marc S.	<p><u>Terrorist's Truck Energy Dissipating Systems</u> By Marc S. Caspe, Chief Engineer, McGinnis Chen Associates, LLP</p> <p><u>Summary of Remarks:</u></p> <p>Mr. Caspe opens by assuring his audience that vulnerable properties can be protected against blast damage, and that blast damage retrofitting options can be more effective, less disruptive and less costly than steps taking to protect against loss of life alone. He points to state-of-the-art computer simulations that conform to both Defense Department and FAA requirements that "can provide property owners with concise information about retrofit options." These simulations typically analyze expected building damage and anticipated injuries for a number of different TNT or C-4 explosives and charge locations and present this information graphically in three dimensions.</p> <p>Having evaluated the potential risks, the property owner can then evaluate the costs, benefits and disruptions a variety of retrofit options would pose. Mr. Caspe mentions a number of possibilities, including:</p> <ul style="list-style-type: none"> • Decorative barricades designed to prevent vehicles carrying explosives from getting too close to the building. • Improving the elastic strength of a structure so that it reflects some of the blast • Improving the inelastic ductility of a structure so that it can dissipate blast energy • Plastic wrapping columns and film coating windows to contain shattered concrete and glass shrapnel. • Increasing a structure's viscous damping so that it can better dissipate blast energy. • Use the kinetic energy of sliding walls to reflect a blast's overpressure and sliding friction to dissipate the blast's impulse of energy without damage. <p>In conclusion, Mr. Caspe insists that "evaluating this full range of retrofit options permits property owners to make informed decisions concerning protection of property, lives, equipment assets and security."</p>

Faulk, Wilber C.	<p><u>Responding to Disaster Damage to Collections</u> By Wilber C. Faulk, CPP, Sr. Project Manager, Getty Conservation Institute, and Jerry C. Podany, Head, Department of Antiquities Conservation, J. Paul Getty Museum</p> <p><u>Summary of Remarks:</u></p> <p>Mr. Faulk describes the focus of the disaster response plans he has had a part in developing as bridging people with the protection of collections, and training people to be prepared for emergencies. Not only can a well-formulated plan of response make mitigating damaging much easier, but they can also instill confidence and competence in responders during an event. Nonetheless, many institutions and organizations do not conduct regular drills or prepare emergency plans, and that when these plans are prepared, the emphasis is usually on life over property. Emergency planning, explains Mr. Faulk, is not about money, since much of the planning costs little or no money, but about leadership. Being able to organize drills and knowing who is responsible for what collections in the event of an emergency are essential. Those responsible for response plans should provide emergency supplies and equipment, know how to use them, and store them in a location that will be accessible in an emergency.</p> <p>Mr. Podany picks up by asking his audience to question what will happen to the “stuff” in a building in the event of an emergency. He reminds them that the time to ask questions like that is well before the advent of a disaster, when you have time to consider your response and answer correctly. Emergencies will happen, and what to do in that event depends on the nature of the disaster and the materials at risk. Mr. Podany reiterates Mr. Faulk’s point that some planning has no cost. Developing a good relationship with curators, setting up a phone tree, surveying possible threats, and determining relocation sites can all be done for free, and are essential in formulating an effective plan. Such a plan should consider the safety of both the visitor and the care of the collection, and must be regularly discussed and updated. Long-term plans should include improving the structure housing the collection, such as a state-of-the-art security system.</p>
Hinman, Eve	<p><u>Blast Upgrade of Windows for Historic Buildings</u> By Eve Hinman, Eng.Sc.D., P.E., Hinman Consulting Engineers, Inc.</p> <p><u>Summary of Remarks:</u></p> <p>Upgrading windows to resist the effects of explosive attack is a complex task that entails, among other issues, a trade-off between protection level and cost. To make the upgrade economically feasible, often the protection level needs to be reduced. If the building has historic significance, the situation is further complicated by additional constraints regarding the materials and building appearance. Some constraints may include:</p> <ul style="list-style-type: none"> • Limiting impact on the historic nature of the windows; • Limit destruction of historic fabric; • Upgrade options are to be reversible in the future;

	<ul style="list-style-type: none"> • Maintain window operability; • Do not alter the exterior appearance of the building; and • Minimize impact on interior appearance of the building. <p>A common solution for upgrading existing windows is the application of daylight film to the interior face. However, this solution may not improve the hazard condition because the muntins, which are often wood for historic buildings, may be weaker than the glass. This will lead to the frame and windows exiting the opening leading to a higher level of casualties.</p> <p>One viable upgrade options is to replace the muntins with steel members that have wood facades. This solution is often prohibitively expensive except for buildings that are of the highest criticality. Less expensive solutions include interior “catchers mitt” solutions, such as a taut blast curtain or a storm window on the inside face. In cases where the exterior wall is also weak, an interior concrete wall may be needed to sufficiently reduce hazard levels for occupants. Examples of design solutions proposed for three historic federal buildings in Washington, D.C., including the U.S. Department of the Interior, were discussed. Issues discussed included the technical issues that need to be resolved to enhance protection levels, the relative effectiveness of different upgrade solutions, and site-specific requirements that govern solutions.</p>
McAuley, Fred M.	<p><u>Untitled Presentation</u> By Fred M. McAuley, Jr., Office of the Chief of Engineers Value Engineering Study Team, U.S. Army Corps of Engineers</p> <p><u>Summary of Remarks:</u></p> <p>Value Engineering/Value Analysis/Value Management is a powerful problem-solving tool that can be used to achieve the best value, save time, and use resources most effectively. It is mandated for all USACE projects in the public sector. VE Analysis is most effective when it is begun early in the planning process. VE teams should include people from a variety of disciplines who have a stake in the outcomes. The best cost savings are achieved the early predesign phases. By the time the project is in construction, resistance becomes higher and major changes are more costly to implement.</p> <p>VE teams are lead by a facilitator through an established procedure, including project familiarization, creative brainstorming, analysis of options, development and evaluation of alternatives, and, finally, identification of the best course of action. This process allows one to quantify what otherwise seems to be subjective and qualitative: the “Best Value” is the least cost to accomplish the function, performance, and quality required by the project proponent to an acceptable degree. Increased costs, therefore, lower “Best Value” unless there is an equal or greater increase in the function, performance, or quality. In addition, istic preservation expertise on the VE team can minimize costly mistakes and protect historic integrity.</p> <p>Successful VE projects have included the Arkansas National Wildlife Refuge, which won a National Environmental Honors Award, and two new East African embassies which were built on accelerated, tightly controlled</p>

	<p>design-build schedules. But the most effective VE/VA/VM efforts require planning ahead: schedule personnel, time, and commit the necessary resources early in the planning process, select the best people for your team, and empower the VE team to gain momentum and to create opportunities.</p>
<p>McAvoy, Christy Johnson</p>	<p><u>Disaster Response and Recovery for Historic Places</u> By Christy Johnson McAvoy, Historic Resources Group, LLC</p> <p><u>Summary of Remarks:</u></p> <p>Ms. McAvoy opens with a quote from Grace Gary of Preservation Pennsylvania: "you have won if the loss of one building leads to the protection of other buildings." She points her audience to the California Preservation Foundation's 1996 guide <i>20 Tools That Protect Historic Resources After an Earthquake</i>.</p> <p>Ms. McAvoy goes on to outline a number of steps that should be undertaken before the advent of disaster. These steps include the distribution of lists of resources to local, state, and federal planning agencies, the adoption of preservation sensitive disaster ordinances at the local level, working to codify and simplify the repair process for private property owners, and simply knowing and being familiar with your historic resources. This includes understanding it's significance, being aware of who owns the property, and recognizing what zoning concerns affect it, not to mention its physical condition, financial value, and accessibility. Once these resources are properly known, the preservationist should seek to publicize said resources, a process that includes identifying the potential threat to begin with. One must also know the ultimate goal of any preservation effort, among which can be stabilization, passing protective legislation, and finding adequate financial resources.</p> <p>She urges everyone to think about a number of things. One should pick their battles intelligently, with an eye not necessarily on site-specific decisions, but a more general policy of preservation. Efforts should be made to create a stable, well-organized, and active local group of individuals and organizations with a vested interest in historic preservation, and this network should be familiar to those who would make policy regarding preservation activities. All of this should be undertaken in order to develop a plan of action, because "a planned response to crisis is better than spontaneous reaction." To prepare, Ms. McAvoy suggests creating a "disaster" in a box. In a large box or other portable container, one should assemble current historic resource surveys, damage assessment forms, a camera, hard hat, shoes and flashlight, a phone and relevant phone numbers (such as city government and non-profit preservation groups), lists of professional architects, engineers, and consultants and material suppliers, and copies of model ordinances and programmatic agreements.</p> <p>One should know the local government departmental structure, because key decisions relating to historic preservation take place in only a few departments. Being aware of the protocols and procedures of local authority, and maintaining a cordial and effective working relationship with</p>

	<p>that authority before disaster strikes serves to make disaster response move much more smoothly and effectively. Similarly, if not already familiar with local, state and federal law relating to heritage conservation, disaster preparedness and emergency management, it is imperative that historic preservation personnel become familiar with them, and keep copies of relevant legislation handy. And, of course, make frequent contact with elected and appointed individuals, and seek to educate them on preservation continuously.</p>
Roy, Charity	<p><u>Financial Implications of Disaster: Risk Assessment's Role</u> By Charity Roy, Loss Control Representative, Chubb Group of Insurance Companies</p> <p><u>Summary of Remarks:</u></p> <p>Beginning by defining her terms, Ms. Roy defines "hazard" as an act posing potential harm, "risk" as the probability of suffering a degree of damage from hazard, and "loss" as an outcome reducing an organization's financial value. To this end, "risk assessment" is the overall process of identifying and analyzing risk, generally with the goal or mitigating loss. In order to effectively assess risk exposure, one must identify vulnerabilities, quantify exposures, and identify the probability of hazard, the immediate attention area, what controls are in place, and what mitigation steps can be taken. She outlines five steps to contingency risk assessment: set risk assessment objectives, gather stakeholders and experts, identify and assess the risk, rank hazards and causal events, and develop risk-based scenarios.</p> <p>The objectives of risk assessment should be specific, measurable, action-oriented, realistic, and time sensitive. Stakeholders and experts can include individuals within the organization, and they should seek to verify their goals, discuss their varying levels of commitment, and ultimately defined the risk assessment decision-making process. The hazard identification should not only identify potential hazards, but also seek to understand the historical information regarding the site at-risk, and seek expert opinion. Three questions should be asked to determine the risk associated with hazard: what can go wrong, how likely is something to go wrong, and what is the impact of something going wrong? These risks, once identified, should be ranked, based on frequency (probability), severity (impact) and risk (frequency x severity).</p> <p>Once this information has been gathered, various different scenarios should be discussed in order to evaluate possible responses to hazards. Thought should be given to what events might present hazardous situations, particularly speed and duration of events. A variety of scenarios should be considered, including, but not limited to, the most likely and worst-case outcomes. Ms. Roy reminds her audience that loss can include more than physical objects, such as the loss of productivity should a disaster interrupt normal business operation, causing a loss in sales.</p> <p>Finally, Ms. Roy suggests a variety of relatively low-key loss control ideas, such as the installation and maintenance of smoke detectors, sprinkler</p>

	systems, room cut-offs, burglary detection systems, and regular backups of computer information.
Spaulding, Stephen	<p><u>Responding to Terrorist Attack</u> By Stephen Spaulding, Chief, Building Conservation Center, Northeast Region, National Park Service</p> <p><u>Summary of Remarks:</u></p> <p>Describing the impact of various disasters on buildings, Mr. Spaulding discusses a number of risks. The first, water, can cause rot and mold, but these things take time to set in, and do not generally require, or elicit, and immediate response. Fire, on the other hand, can be very destructive, and often requires a fast response. In addition, fire is often directly linked to terrorist acts, such as arson. Wind, similarly, can be very destructive, particularly in the form of tornados or hurricanes, but is seldom directly linked to terrorism. All of these forms of disaster, though, can lead to collapse, and lack of good, constant maintenance of a structure only increases the severity of risk. The major difference between natural disasters such as earthquakes, tornados, or hurricanes and terrorist attacks, such as the events of September 11th, 2001, is that the latter more often than not has a psychological effect as great as the physical effect of the destruction.</p> <p>Responding effectively to an attack requires a good deal of preparation, including materials like phones, batteries, and flashlights, and a plan to facilitate communication between the various affected parties and recognizes local authority figures. A plan to respond to fire, for instance, should include communication with local fire departments. Finally, before leaving a site, a responding team should sit down and talk about what was found and what remains to be done.</p>
Stubbs, John H.	<p><u>Our Endangered Heritage</u> By John H. Stubbs, Vice President, World Monuments Fund</p> <p><u>Summary of Remarks:</u></p> <p>Mr. Stubbs begins his presentation by thanking the organizers and his fellow speakers for providing a forum for the presentation of the newest ideas and latest developments in historic preservation. Additionally, he notes how much progress has been made in the ten months preceding the conference with regards to protecting the historic places and collections in America. He goes on to identify a number of ways in which the question of protection have been viewed since September 11th, noting the "hundreds of articles... [and] plethora of conferences like this with the aim of generating new ideas and sharing best practices," the recognition that historic landmarks are potential terrorist targets, revisions in building codes to reduce the risk of damage, and the introduction of a variety of high tech security measures to further shore up defenses against a variety of potential disasters. He compares the growth of an international historic preservation ethos to the similar growth in nature conservation two or three decades ago, and he places particular emphasis on the ways in which inter-government relations, as well as how government relations to the public, have changed in order to seek ways to best improve security, and characterizes this change as a good thing.</p>

	<p>Despite these promising developments, however, Mr. Stubbs goes on to stress that there is still much room for improvement. He mentions the large number of risks facing historic artifacts, and suggests that one way in which this risk can be properly estimated and mitigated is through effective cataloguing and surveying projects, and points to the National Register of Historic Places as an ideal model. Going on to discuss why historical places and collections are at risk, he mentions the different categories of risk, including natural risks, man-made risks, and risks caused by the passage of time itself. He quickly clarifies, though, that not all risks can be neatly organized into these categories, and that specific new risks emerge all the time. He points to the World Meteorological Bureau in Switzerland's ongoing problems with tidal surge, which pose a significant threat to coastal sites, and the problems faced by managers of Greater Zimbabwe in Africa "in dealing with animals, aardvarks in particular, burrowing beneath and destabilizing stone wall foundations." He also mentions the near-limitless risks that a combinations of threats can pose, such as earthquakes which start fires, or even overreaction by well-meaning clean-up operations, which leads to salvageable buildings being bulldozed.</p> <p>The most substantial threat, in Mr. Stubbs estimation, is not the risk of natural disaster, but rather willful human destruction. History, he claims, is replete with examples of the intentional destruction of culturally significant sites and artifacts, from ancient Babylon, to modern America. On the other hand, so to is history full of examples of preservation. While Egypt's King Akenaten's capital of Amarna was razed to the ground by his successors, and while Rome leveled Carthage to the ground and salted the earth, there are counterexamples such as how Alexander the Great's "went to great pains to not destroy the places he conquered, believing the way to the hearts of people is through recognizing their own culture." Nonetheless, even modern history is filled with the intentional destruction items of historic and cultural relevance, from the purges of iconoclasm and the Crusades that destroyed much of the remnants Byzantine culture, the destruction involved in the Spanish conquest of the Americas in the 16th and 17th centuries, and the cultural and political revolutions in both England and France in the 17th and 18th centuries, respectively. Interestingly, Mr. Stubbs notes, it was the French Revolution that led to the formation of the first formal preservation bureaucracy in order to properly catalog the massive influx of newly nationalized private and religious properties.</p> <p>The 20th century and its rapid increase in technology led to new and ever more drastic human threats to our cultural history. While Adolf Hitler and the German Nazi party razed the Polish cities of Warsaw and Gdansk to the ground, and planned a similar fate for both Paris and St. Petersburg, foreword-thinking individuals similarly utilized modern technology to document and protect whatever they could, perhaps most famously represented by the photo-documentation of Warsaw's Old Town in the days before its destruction, which both preserved some record of the original site, and served as a basis for the postwar reconstruction of the city. Even so, reconstruction of many places destroyed in World War II continues to this day, with the the renovations of Frauenkirche in Dresden and the Reichstag in Berlin only having been recently completed, to name just two examples. Even more recently, the campaigns of destruction carried out in the former Yugoslavia in the early 1990s, and in</p>
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	<p>Afghanistan in the later part of that decade, reminds us "that the protection of historic monuments afforded by the Blue Shield provision of the Hague Convention can mean nothing if the combatants choose to see it that way."</p> <p>The post-September 11th era has changed things once again. Referring to the January 12, 2002 issue of <i>The Economist</i>, Mr. Stubbs points out a number of changes in our cultural landscape post-9/11. First, Americans have an extraordinary confidence in government, but a confidence that almost certainly will not last for long. Preservation efforts should move quickly to capitalize on this confidence and admiration. Secondly, the aftermath of the crisis has granted the United States a historic opportunity to "engage more with the rest of the world on a sustained basis." Mr. Stubbs emphasizes that this should extend beyond traditional matters of foreign policy and into the heritage conservation field, suggesting that the National Park Service should make an effort to cooperate with the governments of places like France, Germany and Japan, all of which are already "heavily involved with heritage conservation projects in other countries with aims of both improving relations, and foreign trade."</p> <p>Mr. Stubbs closes by mentioning how milestones in the American preservation movement come in roughly thirty year cycles, and identifies the last of these milestones as the passage of the National Historic Preservation Act in 1966. He muses that the next cycle may well have "been defined by the challenges posed to the country's cultural landmarks after September 11th." He urges everyone to do their best to rise to the occasion, as has been done many times in the past.</p>
Turnbull, Jay	<p><u>Security Improvements at the U.S. Court of Appeals, San Francisco</u> By Jay Turnbull, Page and Turnbull</p> <p><u>Summary of Remarks:</u></p> <p>The San Francisco U.S. Court of Appeals is architecturally credited to James Knox Taylor, but over time, was further modified and augmented by many other Treasury architects. The structure was designed not only to serve as a court, but also a Post Office. While it had survived throughout much of its history intact, most notably sustaining minimal damage in the infamous 1906 earthquake, it was severely impacted during the 1989 Loma Prieta quake, which led to a eight year project in the early 1990s to retrofit and improve the structure's steel framing, which was used to support some of the weight of the large granite walls of the building so as to redirect most of the building's weight from the foundation.</p> <p>The retrofit project made a concerted effort to maintain the historic character of the structure. Finish materials were removed and later re-installed, for instance. But while the project did eventually improve the safety and security of the building, some decisions would prove to be quite controversial, such as the decision to remove the post office from the premises to improve safety and provide more room for the staff of the court.</p>

	<p>Recent security measures have been relatively elaborate, including verification of ID and social security numbers during a pre-screening process, and the insistence that all visitors be escorted through the building. Even more recently, additional security cameras and perimeter lights have been installed, the barbed wire fence surrounding the rear of the facility has been heightened, and exposed utility piping has been sealed off. In conclusion, Mr. Turnbull defends the decision to remove the post office in order to improve security, and notes how the majority of changes were left to the first and second floors of the structure, while the third and fourth floors remained largely unchanged.</p>
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